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THE PLOTTER

CLACKAMAS COUNTY AREA T/S
USERS GROUP
NEWS LETTER

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MEETING

The AUGUST meeting will be:

on: FRI., AUGUST 8, 1986

at: 7:30 P. M.

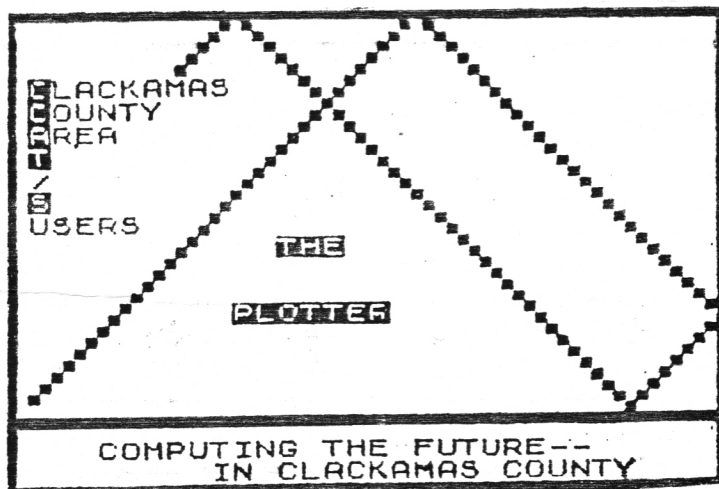
in: COMMUNITY ROOM

FAR WEST FEDERAL S & L

OREGON CITY SHOPPING CENTER

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Chairmans' Corner

I hope this months newsletter finds all of you enjoying your summer as much as I am. I have not been computing much lately and feel a little out touch with things. I need to thank Dick for filling in at the last meeting, while I was out of town again. Thanks Dick!

We tried to get some interest in SIG's, specifically machine code, in the past but have not met with much success. I have not heard much from you lately and wonder if there is still any interest in SIG. Bring your ideas to the august meeting and we can discuss them.

Bring a friend, too. Remember summer is for fun, so go have some and I'll see you at the meeting.

Stage 2. Player -1- Score 2500



SECRETARY'S SECRETS

by Jack Armstrong

Vice-Chairman Dick Wagner started the meeting at 7:45 p.m. with the request for a volunteer for the position of Librarian. Requirements are modest: storage of library materials and a few hours each month to log in new arrivals and keep a check-out log on items borrowed. It would be preferable that it be someone with A&J drives to keep the inventory up to date on wafers which are furnished by the group.

The financial report from Rod showed us to be in good financial shape. The total mentioned included income from subscriptions and ads. There is no meeting for July and there will be a card sent to members as a meeting notice. The Plotter resumes with this August issue. No old business was discussed.

New business brought an introduction of Rod's nephew, Tad Hendrickson, who was visiting and donated a program to our library. D. Lewis brought our attention to a computer bookstore, MAGRATHEA, which is located at 89th and Stark. The phone number is 254-2045--ask for Marla Bartel. They expressed a desire to get our newsletter and they list the various clubs and their meeting times/dates. Mike Montchalin and his wife were introduced as first-time guests.

Rod brought a video tape (courtesy of the Malms) which had appeared on PBS European Journal. It's all about Uncle Clive and his exit from Sinclair. In his own words--he never professed to be a good businessman, his interest is in research and now he will be devoting his time to that and not have to run a computer manufacturing business, too. Dennis set up his Light Screen Designer program to demonstrate the capabilities, including color that is not character cell dependent. Rod mentioned the new products he has to offer, including a 64K print buffer, the ZMU1 cartridge and PRO/FILE +3. Dick had his Extended Basic from Tom Woods for the T/S 1000. The meeting adjourned at 9:00 p.m.

BITS & BYTES

by: ROD GOWEN

Heard any news about the Sinclair/Timex line of products lately? Have you received any information in the mail from other users, user groups, or vendors that may be of interest to our readers? If so, why not share it with us? We need all of the help that we can get. Please send any info that you might have to: Rod Gowen, C/O CCAT/S, 1419 1/2 7th Street, Oregon City, OR 97045, or, phone in at: 503/655-7484, 10 AM-10 PM weekdays. I know that the entire user group will appreciate it!

SINCLAIR RESEARCH LTD-is still in business. Sir Clive is busy with several pet projects that he hopes to finish soon. The PANDORA, a new computer using the flatscreen TV technology is tentatively scheduled for release early in 1987. Amstrad has first crack at it but has expressed very little interest in it. Sir Clive can market it himself, as long as it does not bear the Sinclair name. He is also continuing with research and development on the CMOS WAFER TECHNOLOGY which will, we are told, allow 40 MEGABYTES on a single wafer! We will watch the GENIUS AT WORK!!

AMSTRAD-has said that it will scrap the QL and the SPECTRUM 48. They will, however, be selling the Spectrum 128 with some changes, such as adding an on-board cassette recorder for reliability. This reporter thinks that this is a GIANT STEP BACKWARDS! We hope that someone is successful at getting the rights to build and sell more QL computers.

CURRY COMPUTER-is the US distributor of PYRAMID SOFTWARE. PYRAMID is a French software firm with such QL software as 3D WANDERER, PEINTRE (that's French for PAINTER) and VROOM, the French version of POLE POSITION. From what we have seen, this is a very fine line of software for the QL. It will be carried by dealers across the country. Check with your favorite dealer for price.

TIMEX OF PORTUGAL-has signed a deal to sell 800,000 TC2068 computers and 200,000 TIMEX DD SYSTEMS to POLAND! That is the report in the current issue of SINCLAIR USER. We will just have to wait and see what this does to the market in the rest of the world.

COMPUTER CHRONICLES-is a VERY GOOD PBS program that airs locally on channel 10 KOAP on Sundays at 12 noon. They do not specialize in any one brand of anything. They discuss software applications in the everyday world. If you have the time tune in and take a look at it.

WEST COAST COMPUTER FEST?-We are hearing rumors that some folks are talking about it and may be trying to get something going. Your reporter would love to see one on this end of the country. Maybe San Francisco? It is centrally located. Then all of the people who could not make the Cincinnati show might be able to make it. If you are interested in seeing one come about, please write to TIME DESIGNS or us at The Plotter and we will see to it that the word is heard.

AUTHORIZED QL DEALERS-now number 17 in the US. A+ COMPUTER RESPONSE has told us that there were a few late comers to get their dealerships. Watch for all of the ads that A+ has placed to let you know who and where your local dealer can be found.

TIME DESIGNS-is growing! Not just the subscription list which is probably the largest in the country by now, but they are building and addition to house the magazine offices. Tim Wood, the Publisher/Editor, has indicated that he would like to have a late summer picnic for the two local groups to celebrate a sort of OPEN HOUSE and to say "Thank You" for supporting him. We have not received a fixed date yet, but you may want to keep a weekend or two open near the end of August or Early September. I think it would be a lot of fun!

I did it again! Ran out of room! I guess I will have to stop and save a little for next time.....

COMMENTS ON COMPUSERVE

by: ROD GOWEN

CIS# 70436,1542

CIS: That stands for COMPUSERVE INFORMATION SERVICE. The definition is for those of you not familiar with the service.

BASICS- PART 4- Downloading from the DATA LIBRARY.

So you've been BROWsing through the files. Now you want to DOWNLOAD a program with documentation. This is easier than you think. If you read a description of a program or text file that you want, just press ENTER when asked and you will see the choices given to REREAD, DOWNLOAD or RETURN TO DATA LIB MENU.

At this point you should return to the main Mterm menu and set up your buffer and conversion. The data file DEScription will usually tell you what conversion to use. For test, use NONE, for a BASIC program, use HEX. Leave the buffer CLOSED, as the download will open it automatically. Press ENTER twice to return to the LIBRARY. Press 2 and you will be asked which protocol you want to use. With Mterm II, choose the last choice, DC4. Press ENTER and the text will be transmitted to your buffer. When the transmission is complete, You can go to the menu, log off and print the buffer out.

To DOWNLOAD a BASIC program, you will usually set CON to HEX. Otherwise the procedure is the same. You will notice your screen filling up with what looks like garbage. Do not worry, this is what a program looks like in HEX! For an 8K program, expect to wait about 25 minutes for it to finish. When it is done, Log off and go to basic to SAVE the program.

NEXT TIME-We will take another look at the main CIS menu. You may be in for a surprise or two. There is a lot to look at here...

Hope to see you then ----

FROM THE EDITOR'S DESK

I hope COAT/S members have had that vacation and are now ready to return to computing. I find it a bit of a job to pick up again after leaving my hobby alone for a period. And of course the family needs must not be neglected. At times the wife thinks I spend too much time pushing the keys. It is fortunate that she puts up with this hobby altho I do sense a dig now and then when visitors are present. My wife has a demanding hobby of machine knitting that also takes a lot of time (but maybe better managed) so maybe we are about even.

There are some interesting uses of my computer that might make my wife more tolerant. There are punch card patterns for the knitting machine memory that could be duplicated on the computer and if correct then punched.

Computer programs can be used to generate a garment or part of a garment shape, based on desired dimensions and yarn tension. And of course Pro/File would be great to inventory equipment for 4 knitting machines and a large quantity of various kinds of yarn. Note: I am reminded that there are many other things also in need of inventoring in our house hold!

Maybe the day will come when I will be able to replace (at times) her pencil, paper, and hand calculator with my hobby of computing. This is something this computing husband just doesn't push- it might upset that delicate balance between two interesting hobbies.

PICNIC NOTICE

We have received an invitation to attend an open house/picnic on August 30 at 1 PM at the home/business of Tim and Stephanie Woods, owners and editors of Time Designs Magazine. Address is 29722 Hult Rd, Colton OR. Members of COAT/S and PATS are invited. Bring your own food, plates, etc. Lets hope the weather cooperates this time.

If you can't get away from your computer just bring it with you as there is space in the new office to set it up. We hope that PATS will bring MODEM equipment so we can see their latest developments in this field.

Where is COLTON? Simple-get on Molalla Rd. (Hwy 213) at Oregon City and drive to Molalla, then east thru town on Hwy 211, make a left turn and head northeast on 211 thru Meadowbrook. Watch for Hult Rd, about 3 1/2 miles east of Meadowbrook Jct. Turn left on Hult and watch for the Woods' timbered domicile on the right.

LIBRARY

Have COAT/S members investigated our library recently? The sign-out records show that members don't make much use of it. The newsletters are great (most of about 15 we exchange and have on file). We index important articles, programs, etc. for members to locate specific information.

The article this month on disk drives has some reading references that are on file. A reference that has just showed up is SINQUS NEWS Vol. 4, No. 5. It has an article "To Disc or Not to Disc" with a tabulation of available disc systems, list of reviews, comments from users, problems, and comparisons. This is recommended reading for anyone even remotely interested in disc systems.

You sign out a binder with all of a particular newsletter and it is worth the time to read them all. It is surprising how much information is put into each issue. Give yourself a treat and sign out a book or a newsletter binder.

EXTENDED BASIC is available on cassette from Thomas B. Woods for \$19.95 + \$1.50 P&H. Send to P.O. Box 64, Jefferson, NH 03583.

I will be using this program at times at meetings. Some members saw it in action at the last meeting.

HARDWARE- DISK DRIVES

Dick Wagner

You can now be using a disk drive on your TS computers for about \$200. If you want greater choice in numbers and drive interface it will cost more. Our own Rod Gowen of RMG Enterprises can provide several possible combinations. The lowest in cost is a 5 1/4 inch single sided double density full height Tandon drive (new) for about \$35, then add a case (nice design) and power supply for \$49.95, and a connect up cable for about \$10. This much is close to \$100. I went this route to use my OLIGER interface.

You have 3 choices for a disk drive interface, AERCO, OLIGER, and LARKIN. They are all different as to operating systems (DOS) and price. The LARKIN and AERCO systems are available for TS 1000 and TS 2068 while the OLIGER appears to fit only the TS 2068 at this time.

You will need to do some reading and talking with owners to find out as much as possible about each system. Magazines such as Time Designs have had articles and reviews that will help. AERCO FD-68 is covered in the July/August 85 and Nov./Dec. 85 issues, and OLIGER SAFE system is covered in Mar/April 86 and May/June 86 issues. Other magazines like CTM and TS Horizons have articles as well as various newsletters from other user groups (we have about 15 organizations in our library).

This is a great opportunity to assemble a system to fit your needs. While the available low priced drives are entirely satisfactory if you don't desire the very latest, you can splurge and come up with nice 2 drive systems and even other kinds of drives.

It happened. This program can be merged with any program of less than 8K length (16K memory) and be put into REM 0 so it works properly.

EXTENDED BASIC FOR YOUR TS 1000

Dick Wagner

Extended Basic will put new life into your computer, give you FAST performance, and will provide you with some new programming tools now used on the 2068 computer.

Extended Basic is a program that uses machine code stored in REM 0 and is accessed ANY time in your program with REM and then the command written out (no keywords). Thus you can mix Sinclair Basic with Extended Basic freely, use Extended Basic or Sinclair Basic alone. The interpreter is called with GOSUB 0 in the line ahead of the REM Extended Basic statement.

There are 22 new commands at your disposal, you can put multiple commands and statements in a line, you can use all 24 lines, and PRINT automatically scrolls without error codes.

Here are some of the commands that make this program so interesting -- DRAW, UNDRAW, RESTORE, DATA, READ, FILL, MOVE, CIRCLE, UNCIRCLE, PAPER, UNPAPER, and SCROLL. Some of these are duplicates of the 2068 commands.

So called "standard" commands such as LEFT\$, MID\$, and RIGHT\$ are provided which is helpful when copying programs for other makes of computers. DATA, READ, and RESTORE permit the use of a DATA statement and then READ it into a program. Thus you can use many 2068 programs using such data input methods.

INPUT AND OUTPUT are new to you. KEY replaces INKEY\$ while IN and OUT permit access to the rear port to control peripheral equipment. KEY will return values of multiple key presses. IN and OUT works in either FASY or SLOW modes and you can control and get data from any I/O mapped devices and maintain a continuous display.

There are 11 ERROR CODES that indicate the kind of error and where

THE QL CORNER

By Vince Lyon

Recently I read a book which was supposed to be on superBASIC for the QL. However, when I was more than a little surprised when I came to the section on graphics. It seems that the author thought the graphics potential of the QL was best utilized by loading the included software and reading your manual on QL Easel.

While that may be well and good for those select few who don't wish to include charts or graphs within their own programs, it certainly is not for those who want to design real business programs.

It is not a great chore to use the graphics functions available from BASIC to create charts and graphs. And, the speed of the QL, makes it possible to use charts more quickly from with your own programs that it is to stop and load Easel.

Rather than explain in detail the entire below program (you should by now understand most of it), I'll let it stand on it's own merit. You will find it easy to include in your own programs.

For those who may be interested, I have another version of the program available (SASE) which adjusts the pixel width of the vertical bar chart, depending on the number of entries (up to 250).

If you have any QL programming hints, questions or applications, we would like to hear from you. Columns should reflect more than just one concept if they are to be a usable resource for us all.

```
10 MODE 4:WINDOW #1,450,165,35,0:
PAPER #1,0:INK #1,7:BORDER# 1,1,7:
CSize #1,0,0:CLS
20 WINDOW #0,450,25,35,167:PAPER
#0,2:INK #0,7:BORDER #0,1,5:CLS #0
30 high = 0:low = 100:ac = 0
40 UNDER 1:STRIP 3
50 FOR k=0 TO 19
60 LET lth=RND (2 TO 65)
```

```
70 ac=ac+lth
80 IF lth>high THEN LET high=lth
90 IF lth<low THEN LET low=lth
100 AT k,0:PRINT " "; TO lth;" ";lth
110 NEXT k
120 PRINT #0,,,,,"Horizontal Bar
Chart"\\,,"High = ";high;" Low =
";low,"Average=";(ac/20)
130 FOR k=10 TO 160 STEP 10
140 LINE k,0 TO k,175
150 NEXT k
160 PAUSE
170 UNDER 0:STRIP 0
180 CLS:CLS #0
190 av=0
200 FOR k=1 TO 55
210 LET hgt=RND(5 TO 150)
220 av=av+hgt
230 BLOCK 5,hgt,k*8,160-hgt,5
240 NEXT k
250 PRINT #0,,,,,"Vertical Bar Chart"
260 PRINT #0,,,,,"Average = ";(av/43)
270 PAUSE
280 CLS:CLS #0:POINT 0,0
290 ac=0:cnt=0
300 FOR k=0 TO 170 STEP 2
310 LET np=RND(5 TO 100)
320 ac=ac+np:cnt=cnt+1
330 LINE TO k,np
340 NEXT k
350 INK 2:OVER -1
360 FOR k=0 TO 170 STEP 5
370 LINE k,0 TO k,175
380 NEXT k
390 FOR k=0 TO 100 STEP 5
400 LINE 0,k TO 430,k
410 NEXT k
420 INK 7:OVER 0
430 PRINT #0\\,,"Line Graph"\\,,"
Average = ";ac/cnt
440 LINE 0,ac/cnt TO 430,ac/cnt
450 PAUSE
460 CLS:CLS #0
470 PRINT #0\\,,"End Of Demo"
480 PAUSE
490 CLS #0
```

*** THE END ***

(From ZX Computing June/86)
How fast is your program to run and
do your changes speed it up?
10 POKE 23672,0: POKE 23673,0: POKE
23674,0
-- YOUR PROGRAM--
9900 PRINT "TIME TO RUN IN 1/60
SECONDS IS ";PEEK 23672+256*PEEK
23673+65535*PEEK 23674":RUN

ILLUSIONS

by

Tad Hendrickson

```
10 FOR A=65510 TO 65521:READ B
YTE:POKE A,BYTE:NEXT A
20 FOR A=65522 TO 65533:READ B
YTE:POKE A,BYTE:NEXT A
30 LET P2=PI/2:LET SP=P2/9
40 LET EP=SP/5:LET DT=PI/15
50 LET B=1
60 FOR V=1 TO 5
70 CLS:INK=0:PAPER=7:BORDER=7
80 PRINT AT 21,5;"...constructi
ng view#";V
90 LET DP=EP*V
100 FOR I=DP TO PI STEP SP
110 LET A=COS(I)
120 LET FIRST=1
130 FOR T=0 TO PI STEP DT
140 LET X=A*SIN(T)
150 LET Y=B*COS(T)
160 LET PX=X*80+127
170 LET PY=Y*80+87
180 IF FIRST THEN PLOT PX,PY: L
ET FIRST=0
190 IF NOT FIRST THEN DRAW (PX-
(PEEK 23677)),(PY-(PEEK(23678)))
200 NEXT T
210 NEXT I
220 PRINT AT 21,0;"
"
230 READ CODE
240 POKE 65512,CODE
250 RANDOMIZE USR 65510
260 NEXT V
270 CLS
280 RESTORE 1020
290 FOR V=1 TO 5
300 READ CODE
310 POKE 65527,CODE
320 RANDOMIZE USR 65522
330 GOTO 280
1000 DATA 17,208,0,33,0,64,1,0,24
,237,176,201
1010 DATA 17,0,64,33,208,0,1,0,24
,237,176,201
1020 DATA 132,156,180,204,228
```

The above program draws five displays of a globe and then saves the screen display into memory. After the displays have been saved the program then brings each of the five displays back on to the screen in

succession to give the appearance of a rotating globe. To change the direction of rotation, these changes are required.

RIGHT ROTATION

```
130 FOR T=-PI TO 0 STEP DT
```

ROTATION UP

```
140 Y=A*SIN(T)
150 X=B*COS(T)
```

ROTATION DOWN

```
130 FOR T=-PI TO 0 STEP DT
140 Y=A*SIN(T)
150 X=B*COS(T)
```

To change the globe size, make changes to lines 160 and 170.

Ex. 160 LET PX=X*40+127
 170 LET PY=Y*40+87

It is possible to have more than 5 different displays of an object but you must make changes to the position of where the object is. If you are using only two thirds of the screen, it is possible to have 7 different displays of an object. If you use the bottom two thirds of the screen then the sixth number in line 1000 and the third number in line 1010 must be changed to 72. In line 1020, the first number is 132 and then increase it by 16. In lines 1000 and 1010, the number fourth from the end must be change to 16. When using just one third of the screen, it is possible to have 15 different displays. If you use the middle third of the screen, the sixth number in line 1000 and the third number in line 1010 must be changed to 72. If you are using the bottom third, the sixth number in line 1000 and the third number in line 1010 must be changed to 80. In line 1020, then first number is 132 and increases by 8. In lines 1000 and 1010, the number fourth from the end must be changed to 8.

